Pharmacy Technician Training Program

Minimum Competencies

1. Pharmacy Practice

1.1 The candidate shall be familiar with the mission of pharmacy and the various permitted pharmacy practice sites. The candidate shall also be familiar with the pharmacy literature and references, and the information provided by each.

1.1.1 Mission of Pharmacy

Pharmacy is one of the major components of the health care system. The practice of pharmacy deals with the safe and effective dispensing, administration, and use of medications. Traditionally, the task of the pharmacist has been to ensure the dispensing of medication in accordance with a prescription or medication order. As the profession evolves into the provision of pharmacy care rather than dispensing alone, pharmacists need more help from qualified staff, namely the pharmacy technician. With the help of a pharmacy technician, the pharmacist will have more time to provide pharmacy care to the patient.

1.1.2 Permitted Pharmacy Practice Sites

The permitted practice sites can be classified into the following categories:

- Community pharmacy
- Institutional pharmacy
- Industrial clinic pharmacy
- Nuclear pharmacy
- Parenteral/enteral pharmacy
- Out-of-state pharmacy
- Hospital pharmacy

2. Technician Duties and Responsibilities

2.1 The candidate shall be able to identify the respective roles of the pharmacist and the pharmacy technician.

2.1.1 Role of the Pharmacist

The pharmacist is responsible for complete supervision, management, and compliance with all federal and state pharmacy laws and regulations pertaining to the practice of pharmacy of the entire prescription department.

2.1.2 Role of the Pharmacy Technician

- 2.1.2.1 Provide support to the responsible pharmacist and work under his/her personal, direct, and immediate supervision.
- 2.1.2.2 The pharmacy technician shall not counsel patients.
- 2.2 The candidate shall be able to process prescriptions and/or medication orders, and appropriately maintain a patient profile/information system as directed by the pharmacist.
 - 2.2.1 The pharmacy technician shall ensure completeness of information on the prescription (full name, address, etc.).
 - 2.2.2 The pharmacy technician shall enter the patient profile information into the system and update it as necessary.
 - 2.2.3 The pharmacy technician shall be proficient in determining patient eligibility and copay, and processing reimbursement claim forms.
 - 2.2.4 The pharmacy technician shall enter the prescription into the computer or other data system after interpretation by the pharmacist.
- 2.3 The candidate shall demonstrate the ability to communicate effectively with other health professionals such as physicians, nurses, and pharmacists, as well as the patients. Training will include proper telephone etiquette and protocol, required identification, and professional attire.
 - 2.3.1 The pharmacy technician shall maintain a professional attitude at all times.
 - 2.3.2 The pharmacy technician shall possess good oral and written communication skills.
 - 2.3.3 The pharmacy technician shall identify self as technician when answering the telephone.

3. Pharmacy Laws and Ethics

- 3.1 The candidate shall be familiar with pharmacy laws and regulations, especially as they pertain to pharmacy technician responsibilities.
 - 3.1.1 The pharmacy technician shall be aware of confidentiality issues.
- 3.2 The candidate shall be knowledgeable of the Drug Enforcement Administration (DEA) and state requirements for controlled substances: the candidate shall be able to identify controlled substance labels, understand the rationale for controlled

substances, the need for proper inventory and accountability, and the proper storage of controlled substances.

- 3.2.1 The labels of the manufacturers' packages of controlled substances bear an indication of which schedule the drug belongs to.
- 3.2.2 Controlled substances are classified into different schedules:
 - 3.2.2.1 Schedule I drugs having no medical use in the United States and possessing a high abuse potential.
 - 3.2.2.2 Schedule II drugs that have an accepted medical use and a high abuse potential with severe mental or physical dependence liability.
 - 3.2.2.3 Schedule III drugs that have an accepted medical use and an abuse potential less than those listed in Schedules I and II.
 - 3.2.2.4 Schedule IV drugs than have an accepted medical use and an abuse potential less than those listed in Schedule III.
 - 3.2.2.5 Schedule V drugs that have an accepted medical use and an abuse potential less than those listed in Schedule IV.
- 3.2.3 Because of the abuse potential of these drugs and the tight regulations that pertain to them as enforced by the DEA, it is imperative to prevent loss of such drugs and to keep proper inventory in order to be able to account for such substances.
- 3.2.4 Controlled substances shall be stored in a securely locked cabinet or dispersed throughout the inventory of the pharmacy as directed by the pharmacist.
- 3.3 The candidate shall understand the classification of drugs into legend and over-the-counter (OTC) drugs.
 - 3.3.1 Legend drugs bear the following statement on the package label: "Caution: Federal law prohibits dispensing without a prescription."
 - 3.3.2 Over-the-counter (OTC) drugs may be purchased without a prescription.
- 3.4 The candidate shall understand the role of the Louisiana Board of Pharmacy and the regulations that pertain pharmacy technicians.

4. Pharmaceutical Vocabulary

4.1 The candidate shall demonstrate a thorough knowledge of general pharmaceutical and medical terminology, the apothecary symbols, abbreviations (English and Latin), and the common chemical symbols.

5. Mathematical Terminology and Calculations

- 5.1 The candidate shall be able to convert Roman numerals to Arabic numerals, and to convert from the apothecary and avoirdupois systems to the metric system. The candidate shall also be familiar with household measurements and their equivalents.
 - 5.1.1 Metric, apothecary, and avoirdupois systems
 - 5.1.1.1 The metric system is the system most commonly used to perform calculations in pharmacy.
 - 5.1.1.2 The apothecary system often appears in prescriptions.
 - 5.1.1.3 The avoirdupois weight measurement system is used commercially in the United States.
 - 5.1.1.4 The pharmacy technician shall be familiar with the conversion from one system to the other.

5.1.2 Household measurements

- 5.1.2.1 The directions for use are commonly expressed in units of household measurements.
- 5.2 The candidate shall be proficient with calculations involving decimals, fractions, percentages, and ratios.
- 5.3 The candidate shall be familiar with isotonicity, potency units, milliequivalents, specific gravity, reconstitution, and intravenous flow rates.
 - 5.3.1 Isotonicity an isotonic solution has the same osmotic pressure as that of body fluid.
 - 5.3.2 Potency units an indication of the actual amount of active drug in a given product. The unit of potency of one drug is not related to that of another drug. Potency units are only used to compare potency between different products of the same drug. Mostly used for antibiotics and endocrine preparations.
 - 5.3.3 Milliequivalents an expression of concentration commonly used for electrolytes. Milliequivalents are dependent on the atomic or molecular weight and the valence.

- 5.3.4 Specific gravity a comparison of the density of a given substance with that of water.
- 5.3.5 Reconstitution the process of mixing a powder with a liquid (usually water) in order to obtain a solution or suspension.
- 5.3.6 Intravenous flow rate the speed at which an intravenous solution is administered to a patient. Flow rates are usually expressed as *ml/hr* or *gtt/min* in prescriptions and medication orders.

6. Drug Nomenclature

- 6.1 The candidate shall understand the difference between chemical name, non-proprietary or generic name, and brand name or trademarked name.
 - 6.1.1 Chemical name of a drug is used by chemists to indicate the chemical structure of a drug.
 - 6.1.2 Generic name of a drug is the common name given to a drug.
 - 6.1.3 Brand name or trademarked name of a drug is proprietary to the manufacturer and is used to distinguish between the same product from different manufacturers.
- 6.2 The candidate shall have a thorough knowledge of the generic and corresponding brand names of the common drugs.
- 6.3 The candidate shall be able to identify synonyms and abbreviations.

7. Classification of Drugs

7.1 The candidate shall be familiar with the classes of drugs by their use and pharmacological effect.

8. Pharmaceutical Dosage Forms

- 8.1 The candidate shall be familiar with the various dosage forms (liquid, solid, semi-solid) and the issues pertaining to their stability.
 - 8.1.1 The candidate shall be able to understand the difference between various types of solutions (waters, syrups, elixirs, spirits, tinctures, etc.) and suspensions.
 - 8.1.2 The candidate shall be familiar with various solid dosage forms such as powders, capsules, tablets, etc.
 - 8.1.3 The candidate shall be familiar with ointments, creams, pastes, gels, and suppositories.

8.2 The candidate shall be familiar with controlled-release and sustained-release dosage forms as well as newer drug delivery systems such as inhalation, transdermal, and transmucosal drug delivery systems and the special handling of such dosage forms.

9. Routes of Drug Administration

9.1 The candidate shall be familiar with the various routes of administration (oral, parenteral, topical, transdermal and transmucosal, nasal and inhalation, sublingual and buccal, rectal, vaginal, otic, ocular, etc.) and any special requirements and handling of products that ensure the integrity of the product and its suitability for safe and effective administration (sterility, isotonicity, etc.).

10. Factors Affecting Drug Activity

10.1 The candidate shall be aware of the various factors that might affect drug activity such as age, body weight, gender, race, pregnancy, time of administration, rate of metabolism, hypersensitivity, disease states and preexisting conditions, and drug interactions.

11. Materials Management

- 11.1 The candidate shall know the proper procedure for ordering, receiving, and storing drugs.
- 11.2 The candidate shall be able to understand the information provided on the label by the manufacturer (drug name, NDC number, lot number, expiration date, special storage and handling instructions, etc.).
- 11.3 The candidate shall demonstrate understanding of inventory control and accountability for drugs.

12. Drug Dispensing

- 12.1 The candidate shall demonstrate proficiency in the following:
 - Typing the prescription label
 - Selecting the correct stock bottle
 - Accurately preparing the appropriate quantity of drug product
 - Selecting the proper final container
 - Affixing auxiliary labels, if indicated
 - Preparing the finished product for inspection and final check by pharmacist
- 12.2 The candidate shall be familiar with the use and maintenance of equipment used in pharmacies.